

**Notice of Allowability**

Application No.

09/991,911

Applicant(s)

AKIYOSHI ET AL.

Examiner

Wenpeng Chen

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendments filed on 6/2/2006.
2. ☒ The allowed claim(s) is/are 1-13, 15-16, and 18-21 (now renumbered as 1-3, 5-7, 9-17, 4, 8, 18, and 19, respectively).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 4/28/2006
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_



Wenpeng Chen  
Primary Examiner  
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*Examiner's Amendment/Statement*

1. The amendments filed on 6/2/2006 overcome the following set forth in paper #20060130 mailed on 2/2/2006:

- rejections to Claims 1-3, 15, 18, and 21 under 35 U.S.C. 112, second paragraph;
- all rejections based on the cited prior arts.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Ralph A. Dowell on 7/31/2006.

3. The application has been amended as follows:

In claims

- Replace Claim 20 with the follows:

20. The data medium according to Claim 16, wherein said intermediate image does not relate to a known frame between said first image and said second image.

*Examiner's Statement of Reasons for Allowance*

4. Claims 14 and 17 are canceled by the applicants.

5. Claims 1-13, 15-16, and 18-21 (now renumbered as 1-3, 5-7, 9-17, 4, 8, 18, and 19, respectively) are allowed.

The following is an examiner's statement of reasons for allowance. The prior art fails to teach the methods of Claims 1 and 21, the apparatus of Claim 5, the medium of Claim 15, which specifically comprise the following features in combination with other recited limitations:

- computing a matching between the first image and the second image by detecting corresponding points which correspond between the images as recited;
- quantizing the range of attribute values of the corresponding points in the first image and second image in a relatively coarse manner as recited;
- calculating difference data on the attribute values of the corresponding points based on the quantized range of attribute values as recited.

The following is an examiner's statement of reasons for allowance. The prior art fails to teach the methods of Claim 4, the apparatus of Claim 7, the medium of Claim 16, which specifically comprise the following features in combination with other recited limitations:

- generating a corresponding point file based on the matching, where the corresponding point file comprises positional information on the corresponding points and difference data on attribute values of the corresponding points as recited;
- wherein the difference data of attribute values comprises data obtained by quantizing the range of attribute values of the points which correspond in a relatively coarse manner and calculating difference data on the corresponding points based on the quantized range of attribute values of the corresponding points.

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6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wenpeng Chen whose telephone number is 571-272-7431. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on 571-272-7778. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 571-273-8300 for After Final communications. TC 2600's customer service number is 571-272-2600.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

Wenpeng Chen  
Primary Examiner  
Art Unit 2624

August 1, 2006

